The following sort appears new :—

Feronia Inedita: length 4′; of a brilliant black, elytra of a dark blue; head rather triangular, with two impressions between the eyes; thorax short, transverse, rather cordiform, with a transverse impression in front and another behind; a rather deep longitudinal sulcate in the middle; behind, there are two rather deep and broad impressions, and two others smaller towards the angles; elytra oval, strongly striated; the sutural stria diverging towards the scutellum, but no abbreviated one; two punctiform impressions on the interval between the second and third striæ; one situated a little after the middle of the length, and the other backwards; near the apex, in the place where the striæ unite, there is also a broad and rounded impression; the margin impressed; thighs brown; legs, tarsi, palpi, and antennæ of a light brownish red.

Pine Mountains of Queensland.

Note.—The general form of this insect is very much like the one of *Sollicitus*.

A large number of other sorts of *Argutor* inhabit Australia. I postpone their study to my next publication on Australian *Carabidæ*.

Art. XVI.—*Rubellite—Red Tourmaline—found at Tarrangower, Victoria*, 1867.

By the Rev. J. J. Bleasdale, D.D.

[Read 8th July, 1867.]

I owe my knowledge of the discovery of this gem-stone (new to Victoria) to the courtesy and kindness of Mr. A. R. C. Selwyn, Government Geologist. It was found in Broadford Lead, Tarrangower, but by whom, precisely, I do not know. We are now acquainted with the mineral Tourmaline, under the following generally known names, viz. :—

1. Common School: a black, hard substance, found frequently and abundantly in quartz rocks about the goldfields.

2. Transparent Green Tourmaline: discovered by myself in granite rubbish, not far from Benalla. This consisted of three specimens. One, the largest, about an inch long and a quarter-inch in diameter, and of the colour known as dark bottle green. The other two were smaller and of a paler

colour, which, however, might be, perhaps, accounted for by their being comparatively shorter and less thick. None of them had any terminal planes of crystalline structure—these having been broken off. This stone, when of a reasonably pale green, is a gem-stone by no means to be despised. The cut specimen which lies on the table is evidence of what I am saying.

3. Transparent Red Tourmaline, or Rubellite : found in that district whence so many fine gem-stones have come, especially blue topazes, and in which it is a wonder that hitherto no diamonds have been discovered.

The half-dozen specimens which I am able to lay before you to-night—all embedded in transparent quartz-crystals—are small, it is true, but very interesting ; for they indisputably demonstrate the presence of stone in our mines, and leave us but little reason to fear that where they came from originally, there were plenty more.

This particular substance when transparent, I mean Rubellite, has a value in the scientific world far beyond its appreciation as an ornament. It has a most rare and important use in relation to light. Some of the very best of our polariscopes are formed of two thin transparent polished plates of it—the thinner the better, so that they are barely *thick enough* to polarize. And they possess this advantage, at any rate, over Nicols' prisms of Iceland spar, that they do not occupy much room upon the instrument, and can be often used upon instruments to which it would be difficult to apply the prism. I used them for years and never had reason to be dissatisfied ; and if I were going to resume microscopic investigation I would adopt them again.

As a gem, it is of great beauty when its red colour is perfect, the crystal free from blemishes or feathers, and of a fair size, say from three carats upwards, and would command a good price : perhaps not much less than the Balais Ruby.

With reference to the actual determination and identification of these specimens of Rubellite, I have not personally examined them ; but, I believe, a member of the Council, Mr. Newberry, the scientific chemist to the Department of Mines, has, and has been satisfied. From so much as I can judge from the angles of the crystals shown, and the striation well marked on the specimen in the darkest piece of quartz, I feel no doubt about the matter.

Were I tempted to speculate on a matter of gem-stones, and the conditions under which they are sometimes found,

and the mistakes even the very best judges were liable to make before the establishment of the science of analytical chemistry, I would begin by citing the most extensive and intelligent traveller, and even to this day one of the best authorities on all that appertains to gems—Tavernier. He lived about two centuries ago, or a little more, and was a most successful trader in gems, having made a huge fortune in that occupation. Yet he mistook some red stone, found in agate-balls and quartz-crystals, for the real Oriental ruby. A short extract will suffice to show this abundantly. He says :—

"In Bohemia there are mines that produce pebbles of various sizes, some as large as eggs, others as large as one's fist. When broken, some of these are found to contain rubies as hard and fine as those of Pegu. I remember being one day at Prague, with the Viceroy of Hungary, in whose service I then was, when he and General Wallenstein, Duke of Friedland, were washing their hands before sitting down to dinner. The Viceroy noticed and greatly praised the beauty of a ruby the General wore in a ring, but his admiration was increased when he was told that the mine whence it came was in Bohemia. When the Viceroy departed, the Duke presented him with a basket containing a hundred of the pebbles. On his arrival home the Viceroy had the stones broken, but out of the hundred only two were found to contain a ruby: one, a large gem weighing five carats ; the other, a ruby of one carat."—*Travels.*

There has been a good deal of conjecture as to the particular stone which is here described by him. Some have thought it must have been a garnet, and certainly some of the Bohemian ones are very fine ; but it is quite out of the question that he could have been deceived if he had seen one by candle light, for that stone blackens much in artificial light.

It might have been, perhaps, a zircon, or hyacinth ; but then nearly all of them have characters very distinctive from the grand ruby red, the anthrax live coal of the ancients.

If I were disposed to speculate, as I said, I would go in for a fine specimen of the Red Tourmaline, whether cut or uncut, as being the most likely to have imposed itself on the venerable gem-trader for the true Oriental ruby.